

studies considered that antibiotic prophylaxis was never routinely recommended, while three^{6 11 13} suggested that prophylaxis could be considered in individual patients with prosthetic valves or after previous endocarditis.

The evidence points overwhelmingly in favour of the European Society of Cardiology guidance which is not to use antibiotic prophylaxis routinely for transoesophageal echocardiography for any indication. It may be reasonable to consider antibiotics in occasional cases—for example, a patient with a replacement heart valve and evidence of poor oral hygiene in whom the study is being performed for an indication other than suspected endocarditis. In these individual cases, practice is governed by clinical common sense rather than evidence.

Authors' affiliations

J B Chambers, J C Roxburgh, Cardiothoracic Centre, Guy's and St Thomas' Hospitals, London, UK

J L Klein, Department of Infection, Guy's and St Thomas' Hospitals, London, UK

S R Bennett, Department of Anaesthesia, Castle Hill Hospital, Cottingham, West Yorkshire, UK

M J Monaghan, Cardiac Department, King's College Hospital, London, UK

REFERENCES

- 1 Ramsdale DR, Elliott TSJ, Wright P, *et al.* Guidance on the prophylaxis and treatment of infective endocarditis in adults. <http://www.rcplondon.ac.uk/pubs/books/endocarditis/endocarditis.pdf>
- 2 Horstkotte D, Follath F, Gutschik E, *et al.* Guidelines on prevention, diagnosis and treatment of infective endocarditis. *Eur Heart J* 2004;**25**:267–76.
- 3 Ajani AS, Bisno AL, Chung KJ, *et al.* Prevention of bacterial endocarditis. Recommendations by the American Heart Association. *JAMA* 1990;**264**:2919–22.
- 4 Foster E, Kusumoto FM, Sobol SM, *et al.* Streptococcal endocarditis temporally related to transesophageal echocardiography. *J Am Soc Echocardiogr* 1990;**3**:424–7.
- 5 Gorge G, Erbel R, Henrichs KJ, *et al.* Positive blood cultures during transesophageal echocardiography. *Am J Cardiol* 1990;**65**:1404–5.
- 6 Roudaut R, Lartigue MC, Texier-Maugein J, *et al.* Incidence of bacteraemia or fever during transesophageal echocardiography: a prospective study of 82 patients. *Eur Heart J* 1993;**14**:936–40.
- 7 Pongratz G, Henneke K-H, von der Grun M, *et al.* Risk of endocarditis in transesophageal echocardiography. *Am Heart J* 1993;**125**:190–3.
- 8 Melendez LJ, Chan K-L, Cheung PK, *et al.* Incidence of bacteremia in transesophageal echocardiography: a prospective study of 140 consecutive patients. *J Am Coll Cardiol* 1991;**18**:1650–4.
- 9 Gal RA, Gaeckle TC, Gadasalli S, *et al.* Chemoprophylaxis before transesophageal echocardiography in patients with prosthetic or bioprosthetic cardiac valves. *Am Heart J* 1993;**72**:115–7.
- 10 Botoman VA, Surawicz CM. Bacteremia with gastrointestinal endoscopic procedures. *Gastrointest Endosc* 1986;**32**:342–6.
- 11 Dhas KL, Hemalatha R, Umesan CV, *et al.* Prospective evaluation of the risk of bacteremia induced by transesophageal echocardiography. *Indian Heart J* 2002;**54**:181–3.
- 12 Voller H, Spielberg C, Schroder K, *et al.* Frequency of positive blood cultures during transesophageal echocardiography. *Am J Cardiol* 1991;**68**:1538–40.
- 13 Shyu K-G, Hwang J-J, Lin S-C, *et al.* Prospective study of blood culture during transesophageal echocardiography. *Am Heart J* 1992;**124**:1541–4.
- 14 Steckelberg JM, Khandheria BK, Anhalt JP, *et al.* Prospective evaluation of the risk of bacteremia associated with transesophageal echocardiography. *Circulation* 1991;**84**:177–80.
- 15 Lamich R, Alonso C, Guma JR, *et al.* Prospective study of bacteremia during transesophageal echocardiography. *Am Heart J* 1993;**125**:1454–5.
- 16 Mentec H, Vignon P, Terre S, *et al.* Frequency of bacteremia associated with transesophageal echocardiography in intensive care unit patients: a prospective study of 139 patients. *Crit Care Med* 1995;**23**:1194–9.
- 17 Parker CW. Allergic reactions to long-term benzathine penicillin prophylaxis for rheumatic fever. *Lancet* 1991;**337**:1308–10.
- 18 Idsoe O, Guthe T, Wilcox RR, *et al.* Nature and extent of penicillin side-reactions, with particular reference to fatalities from anaphylactic shock. *Bull World Health Organ* 1968;**38**:159–88.
- 19 Nikutta P, Mantey-Stiers F, Becht I, *et al.* Risk of bacteremia induced by transesophageal echocardiography: analysis of 100 consecutive procedures. *J Am Soc Echocardiogr* 1992;**5**:168–72.

IMAGES IN CARDIOLOGY

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Blue-grey cutaneous discolouration secondary to amiodarone treatment

A 78 year old man was admitted to the cardiology department because of atrial fibrillation with rapid ventricular response. He was an inhabitant of a remote rural area and had been treated with amiodarone for five years, but without medical supervision for a long time.

Physical examination revealed a blue-grey discolouration of his face. The laboratory tests revealed a 100 fold rise of his serum aminotransferase concentrations (AST 3175 µl, ALT 2662 µl). The drug regimen was discontinued and long term anticoagulation and digoxin treatment were used. A skin biopsy was performed and fixed in formalin. Paraffin sections were stained with haematoxylin and eosin (H&E) stain, Perl's for haemosiderin, and Masson-Fontana for melanin pigment. The epidermis was normal but scattered aggregates of macrophages containing ample fine golden brown pigment granules negative for haemosiderin and melanin were seen in the dermis with a tendency for perivascular localisation. Single, granule laden histiocytes were also present and there was no evidence of inflammatory response. After amiodarone discontinuation, serum aminotransferase



Left: Hyperpigmentation of the face. Right: Haematoxylin and eosin stain (×200) showing pigment containing histiocytes (arrows) around dermal blood vessels.

values returned to near normal within a week's time. The skin discolouration was still evident, but diminished, at six months' follow up.

S Nikolidakis
Z S Kyriakides
C Barbatis
zskyr@otenet.gr

There is no conflict of interest related to this manuscript

The study complies with current ethical considerations